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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/886,522	06/21/2001	Hans Artmann	10191/1894	6400

7590

07/14/2003

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New York, NY 10004

EXAMINER

CHEVALIER, ALICIA ANN

ART UNIT

PAPER NUMBER

1772

DATE MAILED: 07/14/2003

10

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicant(s)

09/886,522

Applicant(s)

ARTMANN ET AL.

Examiner

Alicia Chevalier

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 10-24 is/are pending in the application.
- 4a) Of the above claim(s) 16-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

RESPONSE TO AMENDMENT

WITHDRAWN REJECTIONS

1. The 35 U.S.C. §112 rejection of record in paper #8, pages 2-3, paragraph 3 have been withdrawn due to Applicant's amendments in paper #9.
2. The 35 U.S.C. §102 rejection of claims 1-10, 13 and 14 as anticipated by Mehregancy et al. (5,712,609) of record in paper #8, pages 3-4, paragraph 5 have been withdrawn due to Applicant's amendments in paper #9.
3. The 35 U.S.C. §102 rejection of claims 1-15 as anticipated by Leedy (5,834,334) of record in paper 8, pages 4-5, paragraph 6 have been withdrawn due to Applicant's amendments in paper #9.

NEW REJECTIONS

4. **The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.**

Claim Objections

5. Claims 4-6, 12 and 14 are objected to because of the following informalities: being in improper Markush language. Proper language for a Markush group in a claim is "where in R is a material/element selected from the group consisting of A, B, C, and D," MPEP 2173.05. Appropriate correction is required.

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6. Claim 7 objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. In view of Applicant's amendment to claim 1, "the at least one stabilizing element is positioned between the supporting body and the at least one membrane," claim 7 is now redundant.

Claim Rejections - 35 USC § 102

7. Claims 1-8, 10, 13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Bantien (5,259,247).

Bantien discloses a sensor for measuring pressure and acceleration comprising frame of silicon (supporting body), a silicon membrane layer, and a reinforcement zone of additional mass/web (figure 5). The membrane extends unsupported and continuous over an entire recess in the frame and the reinforcement zone is positioned between the frame and the membrane (figure 5). The additional mass in the reinforcement zone prevents unintended deformation of the membrane (col. 3, lines 41-47). The additional mass is in direct contact with the membrane and bonded thereto in at least some areas in the unsupported area. The membrane surface further comprises electrodes (circuit structure/sensitive component) and counterelectrodes (stabilizing surface in corner areas of the membrane) (figure 5). See column 7, lines 16-68.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 11, 12 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bantien (5,259,247) in view of Fujii et al. (4,975,390).

Bantien discloses all the limitations of the instant claimed invention except for the thickness of the stabilizing element and the membrane or the specific silicon compound for the membrane.

Fujii discloses a pressure sensor comprising a silicon substrate and a diaphragm (membrane) made of silicon nitride with a thickness of 0.1 to 20 μm (col. 5, lines 5-23). The silicon nitride layer acts as an insulating film (col. 5, lines 55-57).

It would have been obvious to one of ordinary skill in the art to use a silicon nitride as taught by Fujii as the silicon compound of the membrane of Bantien because of the insulation properties of the silicon nitride.

The exact thickness of the stabilizing element and the membrane is deemed to be a cause effective variable. It would have been obvious to one having ordinary skill in the art to have determined the optimum value of a cause effective variable such as combined thickness of the stabilizing element and the membrane through routine experimentation in the absence of a showing of criticality in the claimed combined thickness. *In re Boesch*, 205 USPQ 215 (CCPA 1980), *In re Woodruff*, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990). One of ordinary skill in the art

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would be motivated to optimize the thickness of the layers depending on the amount of insulation desired and by the teachings of Bantien.

ANSWERS TO APPLICANT'S ARGUMENTS

10. Applicant's arguments file in paper #9 regarding the 35 U.S.C. §112 and §102 rejections of record have been considered but are moot since the rejections have been withdrawn.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

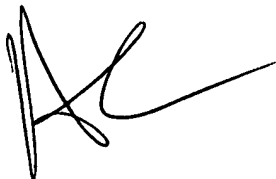
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Chevalier whose telephone number is (703) 305-1139. The Examiner can normally be reached on Monday through Thursday from 8:00 a.m. to 5:00 p.m. The Examiner can also be reached on alternate Fridays

If attempts to reach the Examiner are unsuccessful, the Examiner's supervisor, Harold Pyon can be reached by dialing (703) 308-4251. The fax phone number for the organization official non-final papers is (703) 872-9310. The fax number for after final papers is (703) 872-9311.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose phone number is (703) 308-0661.

ac
7/9/03



**WILLIAM P. WATKINS III
PRIMARY EXAMINER**